ABSTRACT OF THE DISCLOSURE

A sintered aluminum nitride having satisfactorily densified via holes, which is free from cracking and has an excellent appearance, is produced through firing an aluminum nitride molding having at least one highly isolated through-hole for via hole formation. At least one through-hole for formation of dummy via holes not used for electrical connection is formed around the highly isolated through-hole for via hole formation, and the through-hole for dummy via hole formation is also filled with a conductive paste. Thereafter, the aluminum nitride molding is fired into the sintered aluminum nitride.